NUTINI'S GENIUS.

HOW THE BLIND ITALIAN ARTIST PLAYS BY NOTE—THERE IS NOTHING IN THE WHOLE CLASSICAL REPERTOIRE TOO DIFFICULT FOR HIM—HIS WONDERFUL SYSTEM OF COPYING MUSIC BY DOTS—HOW HE PRACTICES AT THE PIANO, FOLLOWING THE DOTTED PAGE WITH HIS RIGHT HAND AND PLAYING THE NOTES WITH THE LEFT.

BY CLEVELAND MOFFETT.

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New York: As soon as the door was opened it was plain that a great musician was in the house. From somewhere upstairs came a shower of golden notes as smooth and softly changing as the lights in a colored fountain. It was very beautiful.

"The signor is practicing," said his friend; "he will be glad to see you. Wait, listen, there!"

His fine Italian face beamed with enthusiasm as the music from above changed into a terrific forte passage that set the walls vibrating. It was as if a whole orchestra was playing.

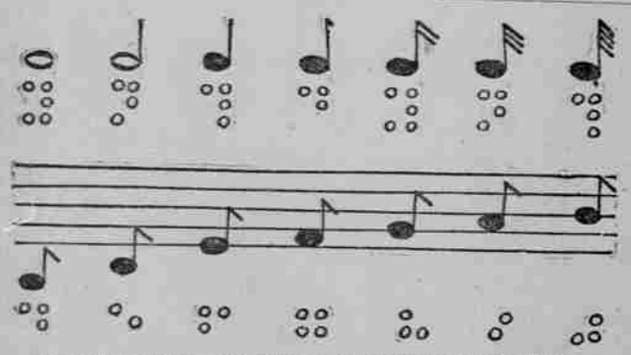
"It is one of his own transpositions; that is the signor's specialty—the transposition of operas. Ah-h-h," he sighed, as a famaliar melody rose above the crashing of chords.

We went upstairs presently and I was introduced to Signor Arturo Nutinin, Italy's blind musician, the man who has played before kings and princes and played with the great Rubenstein. He is young, scarcely over 30. A broad, white face, hair black and long, as musicians wear it, and eyes closed forever. No doubt about the suffering in this face, which has sensitiveness in every line, and yet strength, too, and pride. His black moustache is curled at the ends in approved Italian style. His hand shuts on mine in a strong grasp that tells of muscles in the fingers, short, square-tipped fingers they are, coming out of a square palm—the real musician's hand. His voice is high-pitched and he seems to sing his words (he speaks in French, for his English is scanty yet,) and he smiles easily and sways his head like a woman. This is the man who has been brought across the ocean to show Americans what a little blind baby may grow into if the soul of music be in him.

For an hour or so he played for me, some of Liszt (the Second Rhapsody), some of Chopin (the Fifth Nocturne), anything I asked for. Then he played compositions of his own, ending with an elaborate arrangement of "Home, Sweet Home." Very great is the strength and skill of his hands, his runs and trills murmur like flowing water, his crescendo effects come like the sweep of a storm. And not less remarkable than his execution is the effect of what he plays upon himself. Constantly he sways from side to side, both head and body, his face responding instantly to every change in the music. Now he is sad or stern, now tender almost to tears. His color changes from extreme pallor to the flush of excitement, his laps draw in hard against his teeth, and in the heavy passages his neck swells with tense muscles and the whole man seems transfigured. The smile of that sightless face is something to remember.

"Now his heart is beating 139 times to the minute" said his friend as Nutini rose from the piano. "It's always that way when he stops playing."

It is not for me to say how great an artist he is. The critics will settle that later on, and the public, when they hear him. He plays all that Paderewski plays, and Rosenthal and the rest of them, the whole classical repertoire, in short, and asks no allowance for his blindness. That is what strikes me as most interesting and worthy of some full account, how this blind man is able to render the most difficult compositions with the accurate technique of a performer whose sight is unimpaired, for this is not merely a case of phenomenal ear for music and power of imitation, such as Blind Tom possessed. No doubt Nutini has a wonderfully sensitive ear, as we shall presently see, but his concert pieces are learned by note and committed to memory after the manner of any other artist. When he plays a composition by Schumann he plays it, note for note, as Schumann wrote it, with absolute accuracy, and nothing at haphazard, and when he makes one of those tremendous Liszt jumps from one end of



NUTINI'S SYSTEM OF DOTS FOR RECORDING NOTES.

the keyboard to the other with both hands full of notes, he lands fairly and squarely where he should land and his fingers strike the keys as marked in the printed score; in fact, he can dictate the entire score of whatever he plays and make no mistakes.

This unerring precision in virtuoso passages, though wonderful enough, might be accounted for by that special faculty for judging distances possessed by the blind, but his memory for notes which have never been seen, for all the notes of a vast repertoire, is something that goes beyond ordinary comprehension.

When I asked Sig Nutini how he learns the compositions which he plays, the blind man, with a proper pride, produced his stylus and copying apparatus and, seating himself at a table, proceeded to show me how, by a system of dots on paper, perfected by himself, he can get into his brain and then into his fingers any succession of notes ever printed. He first lays in a frame with a ridged metal back, about the size of a schoolboy's slate, a large sheet of heavy yellow paper, specially made for this purpose. Then along the surface of this frame, he moves a metal ruler with little squares punctured through its length to guide the stylus. Each time he presses the stylus upon the paper an indentation is made which gives a dot on the other side about the size of a pinhead. Within each square of the ruler he makes a certain number of these dots, their arrangement indicating some musical character. Five dots like a letter "E" backward means a whole note, three dots in a right angle means an eighth note, and so on for all the others, as will be understood by the accompanying diagram. From one to five dots must thus be made to indicate every separate note or rest or mark of expression, so that 50 or 60 dots might be necessary to represent the manner of playing a single chord with both hands. What patience, then, must be required to copy out in this way, note by note, page by page, one of Beethoven's sonatas or Liszt's elaborate compositions! Fifty of these large yellow sheets were covered closely with dots in copying Schumann's carnival, and at his home in Italy Nutini has a room piled high with these curious dotted scores, which represent some 800 compositions that he has thus copied and committed to memory. The blind read off English sentences with the greatest fluency, with a clear, staccato effect, somewhat in this style: "Shall you buy my house?" "Does your cousin love his wife?" "Nobody likes him because he is a naughty boy," etc. These he gave us almost as rapidly as he would speak Italian, his busy forefinger running across the lines meantime.

In the midst of the signor's friends were inspired to play a joke upon him, the purpose of which was to show me how he gets his letters from home. Taking from the table a letter received a few days before, the friend went to the door and knocked sharply.

"Avanti," said Nutini.

The friend opened the door and pretended to speak in English to some one outside.

"Cosa e?" (What is it?) asked the signor.

"Una lettera per lei che viene d' all' Italia."

A letter from Italy! instantly Nutini's face was bright with pleasure and surprise. He was all animation, expectation, and taking the letter handed to him he opened it quickly and began to run his finger along the dotted line. I should explain that his family and friends write to Nutini with the stylus in just the same way that he writes down music, and their pages are simply folded over once and sent through the mail without seal as second class matter. There is no danger of any prying postman discovering secrets entrusted to this unfamiliar language.

Before he had read far Nutini discovered the trick that had been played upon him and burst out laughing, enjoying the fun as much as his friend. "I read that letter last week," he said. "I got it along with my newspaper." And then he showed me a newspaper for the blind, printed with dots like the letter that comes to him every week from Italy. His friends told me that he can never get over a feeling of surprise when he enters a room perfectly dark and finds Nutini reading aloud the news of the week, as he often does. And of course the signor is just as apt to do his practising in a dark room as in a light one for he cannot even tell whether the gas is lighted.

Later Nutini spoke of his early years and recalled some charming memories of the institution for the blind in Florence, where he grew to young manhood. He was received in this institution at the age of 7, which marked the commencement of his serious musical studies, but before that as a little tot or 4 or 5 he had amazed his parents by his love for the piano, groping his way instinctively to the instrument and climbing up upon the stool to pick out chords and melodies with his little hands. At the age of 9 he made his first public appearance in a concert at the institution, and played an original transcript of "Il Trovatore," which he repeated for me with great amusement.

"That is the way I played it then," he said, laughing, "this is the way I play it now." And then the showers of golden notes began again and the passages that seemed to tear our the man's soul. While he loves the classical repertoire and devotes himself to it with the utmost conscientiousness, it is a great joy to him to wander free and untrammeled through the beautiful passages of the old operas. These he plays over and over again for his own amusement and the pleasure of his friends, never rendering them twice in the same way, but making them always a delight to those who listen. And when he is alone, in the dark, he loves to play the music of love and poetry and sadness.

"Were you blind from birth?" I asked.

Nutini shook his head. "No, I am blind from the age of nine months; it was an accident, but I do not remember the light."

"Do you think you would be as great an artist as you are if you had not been blind?"

His face brightened. "That is a thought that often helps me when I am discouraged; if I had been able to see, other things would have interested me and taken me from my music. As it is, there has been only music in my life. What else can I do? We come to a new place, my friend takes a walk to see it, why should I take a walk? If I want air I open the window. What I want first is a piano; when I have that and my violin I am happy. I live only in my music, I practice many hours every day, every night, 10, 12 hours, I don't know how many. At Florence I taught music, but no one taught me, except for a few months. What, you did not know that I play the violin? Listen, and you shall hear."

Then with new eagerness Nutini brought forth his violin and played beautiful things upon it. His friend says he is as great an artist at this instrument as he is at the piano. One thing is quite certain, that there is no man in the world, blind or not blind, who can play as well as he on both the piano and violin. And probably there is no one who has so delicate an ear. Not only can he tell the absolute pitch with the greatest ease, many musicians can do that, but he can detect differences in tone too subtle for the piano to record.

"Whistle some note," he said, "any note," and I did so.

"Ah," he said, striking two notes on the piano, "that was between C and C sharp."

And when I struck a glass or produced any other musical tone he indicated instantly on the piano what it was.

I went away realizing that there are compensations in every affliction, and that the life of this blind musician offered a lesson to people of rich endowment on the value of concentration in the doings of men.

EVERYBODY MUST HELP.

The Weal of This Work-a-Day Republic Does Not Lie With the Rich.

New York Sun: "Signs of the Times" was the subject of a lecture delivered Sunday morning by the Rev. Dr. Gustav Gotthell in the Temple Emanuel. He said that we are a peculiar people, a nation in shirt sleeves, the despisers of idlers, whether in the world of wealth, fashion or religion. So deeply penetrated is this people with the idea that "work makes the man," that even those who do not believe in the maxim must, if they care at all for public opinion, assume a semblance of belief in it, and even womankind is gradually being drawn into the whirl of ceaseless employment.

Dr. Gotthell added that whereas 100 years ago the call was for a bill of rights of man, now the cry was for a bill of duties of man. This need makes itself felt in many ways, he said, and the means are multiplying to acquaint the people with the duties of citizenship. While these efforts are but rudimentary, yet the time would come when in every serious emergency and great endeavor the first thought would be what the duty of the people was in the premises and not what must be done out of a sense of charity. When the people shall be accustomed to practice self-help in the widest possible and best organized manner, then, and not until then, will such problems be solved.

The present condition of the wage-worker, Dr. Gotthell said, was full of distress because of the lack of employment. Now eyes are turned toward the wealthy for gifts and charities. That the rich should aid this condition through the governors or city authorities, or through the many charitable institutions or churches, is the cry of the people, while the vast army of those who are employed are not asked to aid their comrades and fellow craftsmen. Though there are many benefactions and benevolent lodges and societies, yet these can do but little so long as the wage-earners themselves are deaf to the cries of their fellows, and so long as the wage-earners themselves are not properly organized. Wage-earners must themselves be enlisted in the service of those nearest them. Why should they not be made to feel the obligation to sacrifice if but a fraction of their earnings for the benefit of their fellows who are in danger of becoming paupers? The number of the rich or even the well-to-do, who can spare large sums besides their regular contributions to established charities, is but small, when compared with the number of those who can do a little something, which would amount to more in the aggregate in the relief of suffering, if their efforts were directed judiciously and earnestly by the properly qualified persons. Let the laborer insist upon the dignity of being counted upon when the hour calls for volunteers in the service of suffering fellow workmen. Such an attitude on the part of the laborer would quietly but surely give him that moral weight in the councils of the nation which he can never obtain by a selfish or corrupt use of his vote, and less still by strikes and revolutions.

An American Woman Honored.

Chicago Tribune: Mrs. Cadwallader Guild, an American who has studies in both Frankfort and Berlin, is the first woman commissioned by the German government to furnish an art contribution to the public buildings. Postmaster General Von Stephen has ordered from her two statues representing the post and telegraph to be placed on the new general postoffice in Berlin. The citizens of Frankfort presented to Herr Von Stephen Mrs. Guild's beautiful bronze statue of Elkitron, which probably paved the way for this further order. Mrs. Guild has also recently executed a bust of the Princess of Saxe-Altenberg. It is now on exhibition in Berlin, and is creating a sensation by its beauty and original treatment.

DOES THE MODERN ARMY RIFLE VIOLATE THE GENEVA CONVENTION?

RECENT EXPERIMENTS MADE BY EUROPEAN GOVERNMENTS SHOW THAT ORDINARY LEAD BULLETS ARE AS EXPLOSIVE IN THEIR EFFECT AS IF FILLED WITH THE DEADLIEST OF COMPOUNDS, THIS RESULT DUE TO THE GREAT VELOCITY WITH WHICH THEY ARE PROJECTED FROM THE MODERN RIFLE—EFFECT OF THE HIGH VELOCITY BULLET ON GLASS, CLAY, METAL AND FLUIDS AS COMPARED WITH THAT OF BULLETS FIRED FROM GUNS USED IN RECENT WARS.

At one of the last meetings of the international congress which met at Geneva, Switzerland, for the purpose of deciding upon methods and rules for the relief of the wounded in battles, it was tacitly agreed between the contracting nations that explosive bullets were not to be used in civilized warfare. Late developments in firearms seem to indicate that the spirit, if not the letter of the convention, is being violated. Neither have the violators gone "around Robin Hood's barn" to accomplish their purpose. It is the result of accident, or rather, of a development in physics. We have simply found that we were not as well acquainted with the rule of inertia or momentum as we thought we were. Geneva convention or not, if any civilized country were to put dynamite or other explosive compound into its bullets all the other civilized countries would rise up in combined protest against the practice. Yet several nations are now using guns the bullets of which are quite as explosive in their effect as though filled with the deadliest of compounds. Most remarkable is the fact that these bullets affect living tissue worse than they do any other substance.

EFFECT OF BULLET (FROM OLD TIME RIFLE.) EXPLOSIVE EFFECT OF BULLET ON SAME MATERIAL FROM MODERN RIFLE.

1—Can of Water. 2—A Cube of Clay. 3—A Plate of Glass.

PRACTICES WHICH THE GENEVA CONVENTION PROHIBITS.

The Geneva convention prohibited the old "Express" rifle bullet. This bullet was of larger caliber than the bullet of today, but it was made of soft lead, was hollow, and had a small steel point. When this steel point struck a bone it stopped short in its flight, while the lead, being softer, kept on, and, unable to go forward, spread out like an ill shaped funnel in all directions, inflicting a terrible wound. Pieces of wax were also used in place of the steel point, the effect being to bunch or "set up" the lead behind, creating, so to speak, a bullet with a knob on it, destructive in its effect and difficult to extract. All this was mechanical, and as such had a definite prohibition set upon it. But nearly every civilized country now uses rifles with a velocity very much in excess of that of the old Express rifle and while they have no mechanical contrivance to increase the destructive powers of the bullet are yet even more deadly in their effect on human tissues. As mentioned above this happens to be the result of an unexpected development in physics.

It is found that when a bullet of very high velocity enters living tissue it produces an explosive or lateral effect directly in proportion to the force of its flight. The phenomenon may be said to resemble the dropping of a stone in a pool of water. The stone continues down to the bottom, but concentric rings of force may be seen circling off in all directions. The more fluid the substance, the greater the effect, as the particles of matter and hence the waves of motion more easily communicate their force to one another. Thus a modern bullet may enter a man's body and make but a small-sized hole, yet the communicated shock would be terrible, shattering every delicate organ in its way and extending in its immediate effect throughout the whole system, and proving fatal if not in one part, then in another. Dynamite could not be more deadly.

CONCLUSIVE EXPERIMENTS.

Professor Rocher of Berne, Switzerland, has recently made some very interesting experiments showing just how this explosive effect acts on different substances. At these and into these he fired bullets of high velocity. Now in regard to glass plates. The man who remembers his natural philosophy will tell you that a stone thrown through a window would probably smash the glass all to pieces, while a bullet would make a small circular hole where it had gone through, without otherwise shattering it. But these old-time calculations are all set at naught under the new system. A low velocity bullet shot through glass during the experiments caused a perforation of about the diameter of the bullet. A high velocity bullet made a large opening, from which rotated numberless concentric fractures communicating and intercommunicating with each other all over the plate of glass. Plates of lead and of soap exhibited a plain hole when a low velocity bullet made it. With high velocity the perforation was much larger than the caliber of the bullet and as there was no loss of weight in the plates it was clear that the large holes were the result of lateral compression due to the explosive effect.

Most curious was the effect of high velocity bullets on clay targets. After the bullets had passed through, it was found that at the point of entrance and of exit the hole was but little larger than the diameter of the bullet, but in the center a cavity somewhat oval in shape and fully as large as a man's fist had been formed. The explosive effect of the bullet had thus expanded or rather compressed the clay outwardly in all directions as it passed through the mass. How terrible would be this literal form when acting on the tissues and fluids of the body.

If the effect on solids was startling, what shall be said of the effect on fluids? Tin cans, either empty or filled with dry substances were fired through with the result of boring a small hole at the point of entrance and exit and of compressing outwardly the substance contained in the can, but when cans of fluid were perforated by high velocity bullets they burst in all directions, conclusively proving that the explosive effect is worse when opposed by liquids. In a recent experiment made by the German government the terrible results of the explosive effects of bullets were noticed. Some anatomical specimens were placed in a convenient position to be shot at. They were wrapped in sheets, so as to give the effect of wearing apparel. The tissues were made as lifelike as possible by the injection of fluids, particularly the injection of blood into the blood vessels. Bullets were fired at various distances up to 2,000 meters. Even at this distance with the bullet traveling at the rate of 170 meters a second, the explosive effect was noticeable, while at a shorter range the lateral disruption was very great.

The reason for this explosive effect in wounds produced by bullets of high velocity has not been clearly explained. Even Major A. C. Girard, one of the foremost surgeons in the United States army, is at a loss to explain it. He says concerning it: "The centrifugal action assumed to be produced by the rotation of the bullet has been believed to be the cause of explosive action. Unfortunately for this theory, this effect was observed with round balls propelled from smooth-bore guns whenever the velocity reached a certain degree. Another circumstance tending to disprove this theory is that, although in the modern rifle the bullet makes 2,500 revolutions in a second, its velocity is such that in a flight of three feet, approximately, only four revolutions are accomplished, and it would, therefore, perform but a small part of one on striking the human body. The fusion of the lead and the scattering in all directions of molten particles has been given as another explanation. Positive experiments, with careful thermometric measurements, have shown that the bullet, while it is heated in its passage through the barrel of the rifle, never acquires the point of fusion thereby. The theory had its origin from the observation that the bullet, on striking iron plates or stones, becomes heated to the point of fusion. This, however, is due to the sudden arrest of its energy and its transformation into heat under well known physical laws. Such an arrest does not take place in the human body unless the velocity of the bullet is greatly reduced, when the transformation into heat is not sufficient to cause fusion, or even scorching.

VELOCITY OF BULLETS.

The last number of the Journal of the Military Service Institution, which is published by the officers of Governor's island, gives a list of the high velocity rifles used by different countries. It is as follows: Austria uses the Mannlicher and Portugal the Kropatscheck, cal. 315 m m; France the Lebel, cal 315 (8 m); Denmark and the United States, the Krag-Jorgensen, cal 30 (7.6 m m); Germany, the Mannlicher, model 88, cal 31 (7.9 m m; Belgium and Turkey, the Mauser, cal 29 (7.6 m m); England, the Lee-Metford, cal 303 (7.7 m m; Switzerland, the Schmidt (7.5 m m); Spain, the Mauser, cal 267 (7.2 m m), and the Netherlands and Roumania, the Mannlicher, cal 25 (6.5 m m).

The average weight of these guns is eight pounds. The average length of the bullet is 30 m m. The velocity at 1,000 yards will average about 885 feet per second. Now with the small calibre and consequently the reduced weight of the cartridge each soldier can carry a larger amount of ammunition than heretofore, and as the Journal points out, the methods of replacing the ammunition expended by rapid firing will be so perfected in the future that troops within firing distance will hereafter have to meet a perfect hail of bullets. When the explosive effect of each of these bullets is considered we get some idea of what a battle of the future will be like. Some time ago reports of the inefficiency of small calibre, high velocity bullets were published, in which it was pointed out that their perforating power was so great as to reduce their power of destruction, the intention being to show that they would perforate a bone or tissue so quickly and so neatly as to cause hardly any wound at all. It is evident, however, that the observations must have concerned "spent" bullets. For minus an explosive effect, which ceases as the extreme range is reached, the effect of a wound would be exactly as recorded. It was noted by the surgeons of the Chitral campaign.

NEW HORRORS OF WAR.

In fact, the horrors of war increase in prospect as time passes. It will need more than tacit agreements at peace conventions to overcome the fatal tendency to highly destructive engines of war. The Maxim and other guns of a similar nature simply mean, if fired into an enemy's ranks, death and destruction ten thousand-fold greater than was possible under the old system. But even these are surpassed by the pneumatic dynamite gun in use in Cuba. This gun shoots dynamite shells, which explode when the object aimed at is struck. Manifestly the gun itself could not be exploded with powder, or the dynamite in the shell would also explode as a result of sympathetic concussion. The Cuban gun is therefore operated by compressed air, which practically blows the shell to its destination. Extending in a coil under the gun proper is a long compressed air tube. At the proper moment the air, acting through the tube, impinges on the dynamite cartridge and projects it to its destination. Quite a lengthy range is attained. Of course, such a firearm is in direct violation of the articles of the Geneva convention, inasmuch as the dynamite cartridge constitutes what is known as an explosive bullet. But as the Cubans had no part in the proceedings of the convention, and as the belligerency of the insurgents has not been recognized generally, the practice of this kind of warfare on the island is rendered paradoxically legitimate. It is therefore an interesting question to consider, in case Cuban belligerency is acknowledged, whether the use of the dynamite gun would be permitted by other countries. Spain certainly could not resort to the same tactics, inasmuch as she is a party to the convention. In fact, with the acquisition of new states, the changed condition of firearms and the decidedly anarchistic methods of warfare which have been lately suggested, it is the opinion of some prominent army officers that new articles will have to be added to the convention if it is to have any influence on the battles of the future.

THEODORE WATERS.